USE OF A PEPTIDE THAT INTERACTS WITH ALPHA V BETA3 INTEGRIN OF ENDOTHELIAL CELL

TECHNICAL FIELD

The present invention relates to a peptide having an angiogenesis-inhibitory effect, and more particularly, to the anti-angiogenic use of a peptide that interacts with the αvβ3 integrin of endothelial cells.

BACKGROUND ART

Angiogenesis is defined as the formation of new capillary blood vessels from preexisting micro-vessels. Normal angiogenesis occurs during embryogenic development, tissue remodeling, organ growth, wound healing and female reproductive cycles (corpus luteum development) under tight physiological regulation (Folkman and Cotran, Int. Rev. Exp. Patho., 16:207-248, 1976). Generally, angiogenesis involves the proteolysis of the blood vessel basement membrane by proteases, followed by the migration, proliferation and differentiation of endothelial cells to form tubules and eventually the regeneration of new blood vessels.

Unregulated and abnormal angiogenesis may lead to various diseases. Examples of angiogenesis-related diseases that occur in pathological conditions include various cancers(tumors); vascular diseases such as vascular malformation, arteriosclerosis, vascular adhesions, and edematous sclerosis; ocular diseases such as corneal graft neovascularization, neovascular glaucoma, diabetic retinopathy, angiogenic corneal disease, macular degeneration, pterygium, retinal degeneration, retrolental fibroplasia and granular conjunctivitis; inflammatory diseases such as